Decision 04-12-047 December 16, 2004

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of Southern California Edison Company (U 338-E) for Authorized Capital Structure, Rate of Return on Common Equity, Embedded Cost of Debt and Preferred Stock, and Overall Rate of Return for Utility Operations for 2005.

Application 04-05-021 (Filed May 10, 2004)

Application of Pacific Gas and Electric Company for Authority to True-up its Cost of Capital for 2004 and to Establish its Authorized Cost of Capital for 2005. (U 39 M)

Application 04-05-023 (Filed May 12, 2004)

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OPINION ON TEST YEAR 2005 RETURN ON EQUITY AND ON PACIFIC GAS AND ELECTRIC COMPANY'S TRUE UP YEAR 2004

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A.04-05-021, A.04-05-023 ALJ/MFG/sid

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OPINION ON TEST YEAR 2005 RETURN ON EQUITY AND ON PACIFIC GAS AND ELECTRIC COMPANY'S TRUE UP YEAR 2004

I. Summary

This decision addresses the debt equivalence issue for Southern California Edison Company (SCE), Pacific Gas and Electric Company (PG&E), and San Diego Gas & Electric Company (SDG&E), adopts a test year 2005 return on equity (ROE) for SCE, and both a true up year 2004 and test year 2005 ROE for PG&E.

The test year 2005 ROE for SCE is 11.40%, which results in a corresponding 9.07% return on rate base and a \$43.6 million revenue requirement reduction for 2005.1

The true up year 2004 and test year 2005 ROE for PG&E is 11.22%. That authorized ROE results in a corresponding return on rate base of 8.53% for true up year 2004 and 8.77% for test year 2005 resulting in a \$1.2 million increase in electric and a \$8.3 million reduction in gas revenue requirements for test year 2005.²

¹ SCE's projected revenue requirement reduction of \$28.2 million at an 11.60% ROE

plus \$15.4 million (\$7.7 million impact on each 10 basis points change in ROE per Exhibit 34) equals a \$43.6 million revenue requirement reduction for test year 2005.

² PG&E's projected \$25.6 million electric and \$0.9 million gas revenue requirement increase at a 11.60% ROE that includes estimated savings from the issuance of energy recovery bonds less \$24.4 electric and \$9.2 gas revenue requirement change (\$8.7 million electric and \$3.3 million gas impact for each 10 basis points change in authorized ROE as set forth in Exhibit 35) equals a \$1.2 million electric increase and \$8.3 million gas reduction in test year 2005 revenue requirements.

II. Jurisdiction and Background

Applicants are public utilities subject to the jurisdiction of this Commission as defined in Pub. Util. Code § 218.³ SCE, a California corporation and wholly owned subsidiary of Edison International, provides electric service principally in southern California. PG&E, a California corporation, provides electric and gas services in northern and central California.

The utilities filed their respective test year 2005 ROE applications pursuant to Decision (D.) 89-01-040.⁴ PG&E also filed its application pursuant to D.03-10-074, which required PG&E to file an application to true up its year 2004 capital structure and ROE upon its implementation of a financing plan approved by the Bankruptcy Court.

SCE seeks to maintain its 11.60% ROE, which would result in a \$28.2 million reduction in its electric revenues. PG&E seeks authority to true up its 2004 capital structure in conformance with its adopted Chapter 11 exit financing plan while maintaining its interim 11.22% ROE for its true up year 2004. PG&E also seeks to increase its authorized ROE to 11.60% from 11.22% for test year 2005. Approval of PG&E's true up year 2004 capital structure and requested test year ROE would result in a net \$2 million electric revenue decrease and a net \$1 million gas revenue requirement increase for test year 2005.

SCE and PG&E included in their respective applications a request for the Commission's recognition and mitigation of debt equivalence, risk associated with long term (three years or more) non-debt obligations such as capacity

³ All statutory references are to the Public Utilities Code unless otherwise stated.

⁴ 30 CPUC2d 576 at 610 (1989).

payments for purchased power contracts. This issue was included in their applications pursuant to the Commission's direction in the procurement proceeding (R.01-10-024) that the appropriate forum to address debt equivalence is the cost of capital proceeding for each utility.⁵

On June 29, 2004, the applications were consolidated into one proceeding, pursuant to Rule 55 of the Commission's Rules of Practice and Procedure. The consolidation of these applications does not necessarily mean that a uniform ROE should be applied to each of the utilities. This is because each of these utilities has unique factors and differences that need to be considered in arriving at a reasonable return. These unique factors and differences encompass three distinct areas: capital structure, long-term debt and preferred stock costs, and return on common equity. The debt equivalence issue will be addressed prior to determining a fair ROE for SCE and PG&E.

III. Debt Equivalence

Debt equivalence is a term used by credit analysts for treating long-term non-debt obligations, such as purchase power agreements (PPAs), leases, or other contracts, as if they were debt, in assessing an entity's credit rating.

Debt equivalence became an issue in a rulemaking proceeding (R.01-10-024) on establishing policies and cost recovery mechanisms for generation procurement and renewable resource development.

Section 454.5(b)(1)) requires "an assessment of the price risk associated with the electrical corporation's portfolio, including any utility-retained generation,

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⁵ D.04-01-050, mimeo., p. 188, Finding of Fact 46.

existing power purchase and exchange contracts, and proposed contracts or purchases.

Although debt equivalence was addressed in the discussion portion of an interim decision (D.04-01-050) of the rulemaking proceeding, that issue was deferred to upcoming cost of capital filings where the energy utilities were to present detailed evidence about the treatment of debt equivalence by the rating agencies. In compliance with that decision, SCE and PG&E included the debt equivalence issue in their respective test year 2005 ROE applications. San Diego Gas & Electric Company (SDG&E), the Office of Ratepayer Advocates (ORA), jointly Aglet Consumer Alliance and The Utility Reform Network (Aglet-TURN), Calpine Corporation (Calpine), and the Cogeneration Association of California (CAC) actively participated in this issue. The rating agencies, Fitch, Moody's and Standard & Poors (S&P) did not participate in this proceeding.

According to the utilities, the rating agencies take the view that a utility would either be constructing generation facilities and therefore taking debt onto its balance sheet, or contracting for a purchased-power obligation that is essentially fixed by the nature of the need to provide service, if not by contract terms. Payments on the PPAs are treated as fixed payments. Therefore, those payments are analyzed as if they are interest on a debt obligation by the rating agencies and included in the rating agencies' analysis of interest coverage, cash flow to debt, and balance sheet, debt to capital. However, payments on those PPA contracts having less than three years remaining are excluded from the rating agencies' analyses. The end result of that analysis is a credit rating. The higher the credit rating the more benefit to ratepayers through lower fixed payments and overall costs.

PG&E explained that Moody's and S&P share a philosophy about purchased power but apply different methodologies in assessing debt equivalence to the individual utilities. Moody's determines how to treat PPAs according to the degree that a real transfer of economic risk has occurred from the utility to the power provider. It assesses the risk subjectively, using a sliding scale on what it calls the "risk containment." The more certain it perceives a payment for PPAs to be, the more likely it is that Moody's will include the net present value in its calculations of financial metrics.

The utilities testified that S&P applies a quantitative approach in assessing debt equivalence. Since 1990 S&P capitalized PPAs on a sliding scale it called a risk spectrum, similar to Moody's method. Up to 100% of the net present value of PPAs were included in its calculations of credit metrics. In May 2003, S&P revised its method of debt equivalency risks to a quantitative approach from the subjective approach. S&P now reflects the opinion that there is little difference between a "take-and-pay" PPA and a "take-or-pay" PPA. As a result, S&P's revised method reflects more risk from PPAs than prior to May 2003. S&P now uses a formula to calculate the net present value of the capacity payments of a PPA using a 10% discount rate and a 30% to 50% risk factor. S&P currently assesses a 30% risk factor on the California energy utilities.

The utilities, while acknowledging that debt equivalence has been reflected in the utilities' credit ratings, since at least 1990, are now concerned that the imputation of debt equivalence on their PPAs adversely impacts their PPA evaluations and credit ratings, thereby resulting in a higher level of operating risks and increased costs.

A. Utilities Proposed Solution

SCE, PG&E, and SDG&E recommended that the Commission establish a debt equivalence policy in this proceeding to alleviate their concern that debt equivalence is an added cost that needs to be considered both in determining an appropriate capital structure and in making resource procurement decisions. Policy recommendations proposed, jointly or individually, by the utilities included recognition that debt equivalence adversely impacts credit ratings; use of annual ROE proceedings to update and mitigate debt equivalence impacts on credit ratings; and, adoption of S&P's quantitative debt equivalence formula for use in assessing debt equivalence costs in power procurement decision-making proceedings.

Calpine concurred with the utilities' need to adopt a debt equivalence policy in this proceeding. However, it recommended that any relationship between debt equivalence and power purchase procurement evaluations should be addressed in the long-term procurement rulemaking proceeding, R.04-04-003.

Aglet-TURN, CAC and ORA recommended that debt equivalence adjustments should be considered on only a case-by-case basis and specific to a utility's current credit profile based on quantitative and qualitative evidence. However, Aglet-TURN did propose general guidelines for inclusion of debt equivalence findings of fact and conclusion of law.⁶

1. Debt Equivalence Impact

What impact does debt equivalence have on SCE and PG&E's test year 2005? We know that SCE's long-term debt currently has investment grade

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⁶ Exhibit 28, p. 29.

credit ratings of BBB from S&P and A-3 from Moody's, and that its preferred stock has a marginal non-investment grade credit rating of BB+ from S&P and a marginal investment grade credit rating of Baa3 from Moody's. To improve its credit ratings, SCE proposed to increase its preferred stock ratio to 9% from 5% and correspondingly, to reduce its long-term debt ratio to 43% from 47% as a least-cost approach to increase its credit quality. If approved, SCE would maintain its test year 2005 target capital structure on average over time beginning in 2005 as a foundation for its ultimate return to a Single-A credit rating or better.

ORA evaluated SCE's credit profile, rating and capital needs. Based on that evaluation, ORA concluded that SCE's proposal to increase its preferred stock component was a relatively low cost means to enhance SCE's credit profile. Aglet-TURN, acknowledging that the increase in preferred stock and associated reduction in the proportion of long-term debt would improve SCE's credit ratios, but opposed SCE's preferred stock proposal for several reasons. Some of those reasons were that SCE had not shown that improved credit ratios are necessary to maintain adequate service, had not performed any cost-effectiveness study, and that the additional after-tax cash flow generated from the additional preferred stock would not be material.

In D.89-11-068, the Commission reasoned that the utilities should be given some discretion to manage their capitalization with a view towards a balance between shareholders' interest, regulatory requirements, and ratepayers' interest. Here, we find that SCE has designed its preferred stock proposal to

⁷ 33 CPUC2d 495 at 541 to 545 (1989).

rebalance its capital structure with the goal of obtaining improved credit ratings, thereby benefiting both shareholders and ratepayers. This approach avoids the need to micro-manage the utility's capital structure and also supports the utility's desire to maintain investment grade ratings; therefore, we concur with SCE's preferred stock proposal.

PG&E, with an investment grade credit rating of BBB- from S&P, did not request any adjustment to its authorized capital structure or ROE applicable to debt equivalence in this proceeding.

Using ratio analysis, SCE and PG&E used the major guideline components of debt to capital, interest coverage, and cash flow to debt used by S&P for assigning credit ratings to compare SCE's and PG&E's test year 2005 ratios on a PPA debt equivalence and non-debt equivalence basis. The result of that comparison is set forth in Appendix A. Of those guideline components, SCE considered cash flow interest coverage the most important benchmark for credit ratings.⁸ PG&E also considered cash flow interest coverage the most important, placing next in very close importance cash flow to total debt, and least importance debt to capital.⁹

While Appendix A showed that the inclusion of PPAs would lower SCE and PG&E's cash flow interest coverage and cash flow to debt coverage, the utilities' cash flow interest coverage would remain within S&P's A credit ratio range and their cash flow to debt ratio would remain within S&P's BBB credit ratio range. Those results would not change under either SCE's requested

⁸ Reporter's Transcript Vol. 1, p. 28.

⁹ Reporter's Transcript Vol. 2, pp. 155 and 156.

11.60% ROE or Aglet-TURN's recommended 10.20% ROE or under PG&E's authorized 11.22% ROE. From that comparison of utility information we can only conclude that debt equivalence would not have a material impact on either SCE's or PG&E's credit ratios or capital structure at this time. Although SDG&E provided information on the impact of debt equivalence on its Otay Mesa PPA, it did not provide any information on what impact, if any, that contract had on its total company credit ratings, total company financial ratios considered by rating agencies, total company capital structure, or total company ROE.

2. Annual ROE Proceeding

Given the changing energy market and utilities' increased dependency on long-term procurement contracts, the utilities' proposal to update debt equivalence impacts on credit ratings and capital structure has merit and should be adopted. The utilities, as part of their annual ROE applications, should include testimony on credit rating and capital structure impacts, including mitigation recommendations, of debt equivalence on their PPAs. Information to be provided in that regard should include current credit ratings from Moody's and S&P; expected impact of its ratings due to debt equivalence; capital structure and ROE with and without debt equivalence; debt to capital, cash flow interest coverage, and cash flow to debt financial ratios with and without debt equivalence; and, pre and post-tax financial ratios. The utilities should also make recommendations for improving and maintaining their credit ratings.

Should a utility find a need for expedited resolution of debt equivalence outside of the annual ROE proceeding due to the lowering of its credit ratings to a non-investment grade level, it should consider filing an application to demonstrate financial need.

SDG&E is in a different situation than SCE and PG&E because it is not required to file an annual ROE application. That is because an all-party settlement agreement to modify SDG&E's Market Indexed Capital Adjustment Mechanism (MICAM) approved by D.03-09-008 included a provision that unless certain off-ramps require otherwise, SDG&E would only file a full ROE application every fifth year. Therefore, absent any unusual circumstances triggering the filing of a ROE application, and absent the Commission's specific order requiring SDG&E to participate in a ROE proceeding, SDG&E's next regularly scheduled ROE application is not due to be filed until May of 2007.

SDG&E intervened in this consolidated ROE proceeding as an interested party on the basis that the general procurement and renewable resource development rulemaking proceeding (R.01-10-024) found in Finding of Fact 46 of D.04-01-050 that the appropriate forum to address debt equivalence is in the ROE proceeding for each utility and that Footnote 26 of D.04-06-011 "required" SDG&E to participate in debt equivalence issues likely to be addressed in this consolidated proceeding to the extent that SDG&E seeks resolution of such issues deferred in the generation procurement and renewable resource development rulemaking (R.01-10-024) proceeding. That footnote actually encouraged, but did not require, SDG&E to participate in this proceeding.

SDG&E, recognizing that the implementation of debt equivalence mitigation can be addressed in annual ROE proceedings, ¹⁰ asserted that debt equivalence policy developed in this consolidated ROE proceeding must pertain

¹⁰ Exhibit 18, p. 9.

to SDG&E as well as to SCE and PG&E on the basis that requiring SDG&E to wait until its next ROE proceeding to develop such policy for SDG&E could have a deleterious affect on its creditworthiness evaluation by the credit agencies.

To mitigate negative credit impacts of its long-term PPAs, SDG&E recommended that SDG&E should be authorized to increase its equity with a simultaneous reduction of debt equal to 65% of the debt equivalence for each individual PPA contract approved by the Commission with the cost associated with that capital structure adjustment rolled into the costs of each PPA. The impact of SDG&E's debt equivalence mitigation recommendation on its recently approved Otay Mesa PPA would be \$40 million at a net present value impact for the nine-year period January 1, 2006 through December 31, 2014 and based on equity equal to 65% of the debt equivalence added to SDG&E's ratemaking capital structure.¹¹

Again, SDG&E provided no information on its current credit ratings and insufficient information to enable us to assess the debt equivalence impact on its overall credit ratings and capital structure. Therefore, we decline to adopt SDG&E's proposal. SDG&E should file a test year 2006 ROE application by May 9, 2005, along with SCE and PG&E, so that we may properly assess what impact, if any, that debt equivalence has on its credit ratings and capital structure, including mitigation recommendations. To the extent that SDG&E believes that debt equivalence may have a material impact and recurring drain on its credit ratios or ratings, SDG&E should consider modifying its MICAM

¹¹ Exhibit 33.

settlement agreement so that it may resolve that concern through yearly ROE applications.

3. S&P's Debt Equivalence Formula

Although the utilities recommended adoption of the S&P debt equivalence formula, ORA and Aglet-TURN opposed the use of S&P's debt equivalence formula and any other specific quantitative financial metric method. ORA contended that sole reliance on such a financial method would ignore other measurable mitigating factors such as future utility outlook, changing regulatory environment, and legislative actions. Aglet-TURN argued that debt equivalence risks are not new; substantive increases in debt equivalence risks will come only if new long-term contracts replace electricity production from utility-owned generation stations or existing contracts with lower levels of debt equivalence; adoption of a specific formula method foregoes flexibility in long-term contract provisions; rating agency methods and risk factors are subject to change; and lack of testimony from the rating agencies, academic and industry evaluation of S&P's calculation method did not allow for a thorough analysis of this method.

We concur with ORA and Aglet-TURN. The evidence presented in this proceeding did not substantiate a need to consider the debt equivalence issue outside of our traditional ROE assessment of risks. We will continue to assess debt equivalence risks along with other financial, regulatory, and operational risks in setting a ROE and balanced capital structure reasonably sufficient to assure confidence in the financial soundness of the utility, to

¹² A legislative action example cited by ORA was the passage of Senate Bill 57, which mitigated SCE's power procurement risk in 2004 and 2005. (Exhibit 23, p. 6).

maintain and support investment-grade credit ratings and to enable it to raise money necessary for the proper discharge of its public duties. Based on the record in this proceeding, the S&P's debt equivalence formula should not be adopted at this time. However, that formula or variation thereof may be considered in assessing the viability of future power procurement contracts.

4. Debt Equivalence Policy

We decline to adopt a formal debt equivalence policy. However, we do recognize that debt equivalence associated with PPAs can affect utility credit ratios, credit ratings, and capital structure. Credit rating agencies have long recognized debt equivalence as a risk factor and we have and will continue to reflect the impact of such risk in establishing a fair and reasonable ROE and in approving a balanced ratemaking capital structure. In that regard, we have identified information that the utilities should provide in their annual cost of capital applications to enable us to better assess debt equivalence risks. Our goal is to provide the utilities with a fair and reasonable ROE and ratemaking capital structure that, among other matters, support investment-grade credit ratings.

IV. Capital Structure

Capital structure consists of long-term debt, preferred stock, and common equity.¹³ Because the level of financial risk that the utilities face is determined in part by the proportion of their debt to permanent capital, or leverage, we must ensure that the utilities' adopted equity ratios that are sufficient to maintain reasonable credit ratings and to attract capital.

 $^{^{\}rm 13}\,$ Excludes short-term debt, debt due within one year.

A. SCE

SCE requested a 2005 capital structure consisting of 43.00% long-term debt, 9.00% preferred stock, and 48.00% common equity. This capital structure reflects a 4.00% reduction in its last authorized debt ratio of 47.00% and a 4.00% increase in its preferred stock ratio. SCE proposed no change to its common equity ratio. The 4% shift of debt to preferred stock was proposed by SCE to mitigate its debt equivalence, improve its financial metrics, encourage the rating agencies to upgrade SCE's credit status, and to lower overall long-term costs.

The only opposition to SCE's proposed capital structure was from Aglet-TURN. Aglet-Turn opposed SCE's request to mitigate debt equivalence by issuing additional preferred stock, as addressed in the prior debt equivalence discussion.

B. PG&E

PG&E requested a true up 2004 capital structure of 48.20% long-term debt, 2.80% preferred stock, and 49.00% common equity. It also requested a 2005

capital structure consisting of 45.50% long-term debt, 2.50% preferred stock, and 52.00% common equity. Its 2005 capital structure reflects a 0.70% reduction in its last authorized long-term debt ratio, a 3.30% reduction in preferred stock, and a 4.00% increase in common equity ratio.

The proposed capital structures of PG&E are consistent with the implementation of its Chapter 11 exit financing and capital structure provision set forth in its Modified Settlement Agreement (MSA). (D.04-12-035, Appendix C, p. 11.)

There is no opposition to PG&E's true up 2004 and 2005 capital structures.

C. Discussion

The capital structures proposed by the utilities are balanced, attainable, intended to maintain an investment grade rating, and to attract capital. For these reasons, we find that the utilities' proposed capital structures are fair. PG&E's true up 2004 capital structure of 48.20% long-term debt, 2.80% preferred stock, and 49.00% common equity and the following test year 2005 capital structures for the utilities are consistent with law, in the public interest, and should be adopted.

	SCE	PG&E
Long-Term Debt	43.00%	45.50%
Preferred Stock	9.00%	2.50%
Common Equity	48.00%	52.00%

The next step in determining a fair ROE is to establish reasonable long-term debt and preferred stock costs.

V. Long-Term Debt and Preferred Stock Costs

Long-term debt and preferred stock costs are based on actual, or embedded, costs. Future interest rates must be anticipated to reflect projected changes in a utility's cost caused by the issuance and retirement of long-term debt and preferred stock during the year. This is because the ROE is established on a forecast basis each year.

In D.90-11-057, we recognized that actual interest rates do vary and that our task is to determine "reasonable" debt cost rather than actual cost based on an arbitrary selection of a past figure. In that regard, we concluded that the latest available interest rate forecast should be used to determine embedded debt cost in ROE proceedings. Consistent with this conclusion, the assigned Commissioners' Scoping Memo and Ruling allowed the utilities to update their long-term debt and preferred stock costs to reflect September 2004 Global Insight forecasted interest rates. That update was submitted on September 27, 2004 as Late-Filed Exhibit 34 by SCE and Late-Filed Exhibit 35 by PG&E.

A. SCE

SCE projected its test year 2005 long-term debt cost to be 6.97% based on a simple average of its year end 2004 and year end 2005 long-term debt forecasts. That forecast provided for the issuance of \$100 million in new long-term debt in 2004 and no new long-term debt in 2005. Based on its late-filed exhibit that updated the impact of the most recent forecast of interest rates, SCE lowered its forecast of long-term debt cost to 6.96% from 6.97%. This rate is

 $^{^{14}\,}$ 38 CPUC2d 233 at 242 and 243 (1990).

123 basis points lower than the 8.19% long-term debt cost authorized in SCE's test year 2003 ROE proceeding.

SCE used that same method to calculate a preferred stock cost of 7.01%. Its forecast of preferred stock cost provided for the issuance of \$200 million of traditional preferred stock in 2004 and an additional \$450 million in test year 2005, as detailed in its Exhibit 3 at pages 22 to 24.

Subsequent to the filing of its application, Moody's upgraded SCE's corporate credit rating and preferred stock to investment grade. In response to the preferred stock upgrade, SCE obtained quotes from three investment banks on the coupon rate at which SCE could expect to favorably issue new preferred equity in the current market. Those quotes were 81 basis points, 33 basis points, and 44 basis points, respectively, above the Aa utility bond rate. Based on a 53 basis points simple average of the investment banks quotes, SCE lowered its preferred stock cost to 6.83% from 7.01%. Based on the most recent forecast of interest rates, SCE further lowered its preferred stock cost to 6.73% from 6.83%.

B. PG&E

PG&E projected a true up year 2004 long-term debt cost of 5.82%. That cost was based on a weighted average of its actual 2004 debt cost prior to April 12, 2004 and its forecast of long-term debt changes that would occur as a result of new issuances, retirements, change in interest rates of its floating rate debt, and changes in the amortization of loss on reacquired debt during the year. For 2004, PG&E expects to refinance \$799 million of bank debt with the proceeds from the issuance of replacement tax exempt Pollution Control (PC) Bonds.

 $^{^{15}\,}$ One basis point equals 0.01%.

Those replacement PC Bonds would be issued in two series, one that is expected to be a three-year fixed-rate bond, and the other a 30-year floating-rate bond.

PG&E projected a test year 2005 long-term debt cost of 5.94%, based in part on its forecast of debt changes that would occur during the year and in part on PG&E's expected implementation of a Dedicated Rate Component (DRC) financing, as provided for in D.03-12-035.

The DRC financing provides a framework for PG&E to refinance a portion of its exit financing if legislation satisfactory to the Commission, TURN, and PG&E is enacted and signed into law that would allow for the securitization of the Modified Settlement Agreement (MSA) Regulatory Asset. Ratepayers would receive the full benefit of this financing through a lower revenue requirement of the MSA Regulatory Asset. After such legislation is enacted, and pursuant to a subsequent financing order from the Commission authorizing the securitization of its DRC, PG&E expects to receive proceeds up to \$3 billion. Those DRC proceeds would be used to pay off existing debt and to buy back common stock so that PG&E can achieve and maintain a target capital structure containing 52% common equity.

PG&E included approximately \$44 million in interest rate hedging cost as a component of its test year 2005 long-term debt pursuant to D.03-09-020.¹⁷ That interest rate cost resulted from PG&E's October 20 and November 3, 2003 execution of \$4.2 billion in interest rate hedges used to implement its approved

¹⁶ The bonds securitized by a DRC would not be issued by PG&E, but by a special purpose entity created solely for this financing.

 $^{^{17}\,}$ D.03-09-020, mimeo., p. 23, Ordering Paragraph 4.

bankruptcy plan to exit from Chapter 11. PG&E seeks to recover its hedging cost over the life of the debt that was hedged.

PG&E projected its preferred stock costs of 6.76% for 2004 and 6.42% for 2005, similar to the method it estimated its embedded long-term cost of debt. The embedded cost of preferred stock reflects the same costs of preferred as authorized in PG&E's 2003 cost of capital proceeding, absent Quarterly Income Preferred Securities (QUIPS).¹⁸ That is because QUIPS, comprised half of PG&E's pre-bankruptcy preferred stock, were deemed in default as a result of its bankruptcy and redeemed on April 12, 2004. For the period after April 12, 2004, PG&E projected changes in its preferred stock. The changes included a decrease due to the removal of the amortization of refunding premiums associated with a 1994 preferred stock redemption and a decrease due to the mandatory redemption of a portion of two issues of higher cost preferred stock.

PG&E also updated its long-term debt costs to reflect the most recent forecast of interest rates. That update resulted in its long-term debt cost being increased to $5.90\%^{19}$ from 5.82% in its true up year 2004 and to $6.10\%^{20}$ from 5.94% in test year 2005. There was no change in PG&E's preferred stock cost.

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	Weighted Factor Debt Cos		Weighted Debt Cost		
Actual JanApril 12th	27.87%	7.51%	2.09%		
Projected Post April 12th	72.13%	5.28%	3.81%		
Weighted Cost			5.90%		

¹⁸ QUIPS are debt instruments with some characteristics of preferred stock, and in the past have been included in the embedded cost of preferred stock net of the tax savings.

C. Discussion

There was no dispute on SCE's test year 2005 cost of long-term debt, or on PG&E's true up year 2004 and test year 2005 costs of long-term debt and preferred stock.

ORA took exception to SCE's test year 2005 cost of preferred stock. ORA forecasted a 6.04% preferred stock cost for SCE based on the historical spread of mandatory redemption preferred stock²¹ issued by SCE in the early 1990's, Moody's recent upgrading of SCE's preferred stock to investment grade, and on the assumption that SCE would continue to issue mandatory redemption preferred stock. However, ORA's forecast of SCE's preferred stock was based on the issuance of a type of preferred stock that SCE will not be issuing. SCE will issue traditional preferred stock, not mandatory preferred stock.²² Hence, we must reject ORA's forecast of preferred stock cost.

SCE's forecast of preferred stock cost based on quotes from investment banks for the issuance of perpetual preferred stock in the current market is more appropriate. However, SCE provided no explanation on why the quote of 81 basis points above Moody's Aa utility rate spread was more than double the other two quotes. Absent the identification of specific benefits in using the highest Moody's Aa utility rate spread quote, we would expect SCE to exercise

²⁰ Late-Filed Exhibit 35, Attachment 3.

Mandatory redemption preferred stock requires sinking fund provisions and redemption of such preferred stock in full after a period of time ranging from 10 to 15 years.

²² Traditional preferred stock is issued in perpetuity and qualifies for the dividend received deduction credit for federal income tax purposes.

prudent management judgment by rejecting that quote. A simple average of the two remaining quotes would result in a more realistic cost estimate. However, with a trend of rising interest rate projections and the continued existence of prior embedded preferred stock, an adjustment based on the simple average of two investment banks would not materially change SCE's overall revenue requirement at this time.²³

As required by D.03-09-020, a Commission Financing Team reviewed PG&E's hedging analysis and supported the terms of the hedges and PG&E's strategy for executing the hedges. Although PG&E incurred \$44 million in hedging cost, ratepayers benefited by almost \$51 million in annual interest expense due to a drop in interest rates, for a present value of \$455 million. PG&E has substantiated that its cost incurred during hedging was reasonable and should be authorized to recover its hedging cost as part of its long-term debt.

SCE and PG&E's long-term debt and preferred stock forecasted costs are consistent with the most recent forecast of interest rates. PG&E's 5.90% long-term debt and 6.76% preferred stock costs for true up year 2004 and the following long-term debt and preferred stock costs for the utilities' test year 2005 are consistent with the law, in the public interest and should be adopted.

	SCE	PG&E
Long-Term Debt	6.96%	6.10%

²³ For example, SCE's change in total embedded preferred stock cost by 18 basis points from 7.01% to 6.83% reduced SCE's revenue requirement by approximately \$2 million (Exhibit 4, p. 38). The adoption of a preferred stock cost of 6.59% based on the two comparable quotes would reduce the 0.61% preferred stock weighted average cost by only 0.6%.

Preferred Stock	6.73%	6.42%

Having determined the appropriate costs of long-term debt and preferred stock we address the appropriate ROE.

VI. Return on Common Equity

The legal standard for setting the fair rate of return has been established by the United States Supreme Court in the <u>Bluefield</u> and <u>Hope</u> cases.²⁴ The <u>Bluefield</u> decision states that a public utility is entitled to earn a return upon the value of its property employed for the convenience of the public and sets forth parameters to assess a reasonable return. Such return should be equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings attended by corresponding risks and uncertainties. That return should also be reasonably sufficient to assure confidence in the financial soundness of the utility, and adequate, under efficient management, to maintain and support its credit and to enable it to raise the money necessary for the proper discharge of its public duties.

The <u>Hope</u> decision reinforces the <u>Bluefield</u> decision and emphasizes that such returns should be sufficient to cover operating expenses and capital costs of the business. The capital cost of business includes debt service and stock dividends. The return should also be commensurate with returns available on alternative investments of comparable risks. However, in applying these

²⁴ The <u>Federal Power Commission v. Hope Natural Gas Company</u>, 320 U.S. 591 (1944) and <u>Bluefield Water Works & Improvement Company v. Public Service Commission of</u> the State of Virginia, 262 U.S. 679 (1923).

parameters, we must not lose sight of our duty to utility ratepayers to protect them from unreasonable risks including risks of imprudent management.

We attempt to set the ROE at a level of return commensurate with market returns on investments having corresponding risks, and adequate to enable a utility to attract investors to finance the replacement and expansion of a utility's facilities to fulfill its public utility service obligation. To accomplish this objective we have consistently evaluated analytical financial models as a starting point to arrive at a fair ROE.

The models commonly used in ROE proceedings are the Capital Asset Pricing Model (CAPM), Discounted Cash Flow (DCF) Analysis, and Market Risk Premium (MRP). Detailed descriptions of each financial model are contained in the record and are not repeated here. It is the application of these subjective inputs that result in a wide range of ROEs being recommended by the parties. The results of these financial models are used to establish a range from which the parties apply risk factors and individual judgment to determine a fair ROE.

A. SCE's Return on Equity

There are two distinct positions on a fair test year 2005 ROE for SCE. SCE and ORA jointly recommended that SCE maintain its currently authorized 11.60% ROE and Aglet—TURN recommended that SCE's authorized ROE be lowered to 10.20%.

1. SCE and ORA's Position

SCE and ORA joint ROE recommendation was based on a Memorandum of Understanding (MOU) they entered into prior to SCE filing its

ROE application. That MOU, signed by SCE on April 26, 2004 and by ORA on April 28, 2004, was based on "the current evidence on interest rates ..."²⁵

SCE and ORA identified three specific factors that led to the MOU. First interest rates began to increase in March 2004. By May 5, 2004, the Aa utility bond rate and Treasury long-term average rate had increased by 70 basis points and 72 basis points, respectively, from their lowest levels in March of 2004. SCE and ORA attributed that increase in interest rates to the March 2004 news of a 308,000 increase in non-farm payroll employment, a 5.1% consumer price increase for the first three months of 2004 compared to a 1.9% increase for all of 2003, and news that retail sales rose more rapidly than expected.²⁶

Second, their comparison of May 5, 2004 Moody's Aa Utility Bond rate of 6.52% and Treasury long-term average rate of 5.41% with a respective 6.98% and 4.90% average rate at the time SCE's last ROE decision was issued led them to believe that interest rates were returning to interest rate levels that prevailed at the end of 2002, and that the differences were not material enough to indicate a change in SCE's test year 2005 ROE.²⁷ Further, SCE and ORA comparison of Global Insight Aa utility bond interest rate September 2002 forecast of 7.16% for test year 2003 with its May 2004 test year 2005 interest rate forecast of 6.59% did not warrant a change in SCE's authorized ROE.²⁸

²⁵ Exhibit 22, p. 9.

²⁶ *Id.* p. 4

²⁷ *Id.* p. 5.

²⁸ *Id.*

Third, they expected interest rates to rise in the future due to the economic news identified above, Global Insight's April 22, 2004 message that higher rates are just a matter of time, and Chairman Greenspan's April 21, 2004 comment that, among other matters, indicators of business investment point to increases in spending for many types of capital equipment.

While ORA relied strictly on the changing interest rate environment, SCE believing that changes in interest rates are only one factor to consider in setting a fair ROE prepared the traditional financial models to support its recommendation.²⁹ Preliminary financial models were prepared by SCE in February and March 2004, while the financial models incorporated into its testimony were prepared subsequently. Its CAPM model, that incorporated Global Insight May 2004 forecasted treasury rates, was prepared a few days prior to the filing of its May 10, 2004 application. Its DCF and MRP financial models were prepared in late April or early May.³⁰

SCE used a proxy group of 14 electric companies in its financial models as risk proxies for SCE. SCE placed no reliance on its DCF result on the basis that many of the comparable companies in proxy group do not comply with DCF formula assumptions, such as having a stable dividend payout ratio, stable price/earnings ratio, and stable market-to-book ratio that is close to one. An SCE example of noncompliance with the formula assumptions was that four of the 14 companies in its proxy group had cut their dividends within the past two years, thereby negating the stable dividend payout assumptions.

²⁹ Reporter's Transcript Vol. 3, p. 405, lines 10-13.

³⁰ *Id.* pp. 404 and 405.

SCE derived a broad 7.89% to 13.72% ROE range from its financial models. This broad range was derived from the lowest and highest result of the financial model undertaken by SCE. The range by individual financial model results undertaken by SCE and by Aglet-TURN, are set forth in Appendix B. The exclusion of its DCF model results compacted that broad range to a 10.33% to 13.72% range.

2. Aglet-TURN's Position

Aglet-TURN applied the CAPM, DCF, and MRP financial models to establish a base for its ROE recommendation. It used a proxy group of 82 electric, combination and natural gas distribution utilities as its proxy group in its financial models as risk proxies for SCE. Its application of those models resulted in a 9.50% to 12.67% ROE range for SCE's test year 2005. From those results Aglet-TURN derived an average CAPM of 11.97%, DCF of 9.66%, and MRP of 11.22%. Aglet-TURN then weighted those average results giving equal weight to its DCF and MRP averages, and placing two-thirds weight to the results of simple MRP and one-third weight to its CAPM.³¹ Less weight was given to its CAPM on the basis that some of the measured betas³² used in the CAPM formula were unstable and subject to severe fluctuations. That weighting resulted in a 10.60% ROE recommendation for SCE prior to any adjustment for risk.

³¹ Exhibit 28, p. 10.

³² Beta, measures the sensitivity of the company's return to the market return, company-specific risk measurements.

Aglet-TURN then assessed financial, business and regulatory risk it found facing SCE to determine what impact those risks should have on the overall ROE. From that assessment, Aglet-TURN concluded that adjustments were appropriate to recognize changes in regulatory and interest rate risks.

From its regulatory risk analysis, Aglet-TURN found that SCE had experienced an improved regulatory climate. In support of this finding Aglet-TURN cited recent favorable comments from the three major rating agencies, Moody's, Standard and Poor's (S&P), and Fitch. Those observations included a Moody's June 5, 2004 recognition of a continuing improvement in the California regulatory environment, including the Commission's approval of the Mountainview generation project, and recent Commission actions relating to other energy matters.³³ Approximately two months later, Moody's upgraded SCE's credit rating to A3 from Baa2 in recognition of a more constructive regulatory environment in California.³⁴ S&P recognized in July of 2003 the Commission's willingness to protect creditworthiness.³⁵ Fitch noted an improved regulatory environment at the Commission at the time it restored SCE's credit ratings to investment grade in September 2002.³⁶

Based on judgment, Aglet-TURN concluded that this improved regulatory climate has reduced the risk of California utilities and their cost of

³³ Exhibit 30, p. 86.

³⁴ *Id.* p. 88.

³⁵ *Id.* p. 53.

³⁶ *Id.* p. 69

equity by approximately 100 basis points. That adjustment, applied to its 10.60% weighted financial models, resulted in an adjusted ROE of 9.60%.

Aglet-TURN's assessment of interest rate changes resulted in an assessment that there was a 60 basis points increased interest rate risks. That interest rate risk added to Aglet-TURN's adjusted 9.60% ROE for SCE resulted in a recommended 10.20% ROE for SCE's test year 2005.

3. Discussion

We must set the ROE at the lowest level that meets the test of reasonableness.³⁷ At the same time, our adopted ROE should be sufficient to provide a margin of safety for payment of interest and preferred dividends, to pay a reasonable common dividend, and to allow for some money to be kept in the business as retained earnings.

Although the parties agree that the models are objective, the results are dependent on subjective inputs.³⁸ The parties used different proxy groups, risk-free rates, beta, market risk premiums, growth rates, calculations of market returns, and time periods within their respective financial models. Parties even took different positions on the appropriateness of the individual financial models. For example, SCE rejected its DCF result, while PG&E declined to use the CAPM and Aglet-TURN placed less weight on its CAPM result than on its DCF and MRP results. Each party addressed the strengths of their respective financial modeling results while other parties addressed their defects and some even went so far as to recalculate the other party's financial modeling based on selective changes.³⁹ Even if those selective changes were considered, the individual party's overall ROE range based on the financial models would not materially change. For example, Aglet-TURN's financial models as recalculated by SCE would result in an overall 11.16% average compared to the 10.95% simple average of Aglet-TURN's financial models. Even if that modified result were

³⁷ 46 CPUC2d at 369 (1992), 78 CPUC at 723 (1975).

³⁸ Reporter's Transcript Vol. 3, p. 408, lines 14-20.

³⁹ Exhibit 4, pp. 25-27.

adopted it would still fall near the midpoint of Aglet-TURN's overall 9.50% to 12.67% range, as shown in Appendix B.

From these broad ROE ranges the parties advance arguments in support for their respective analyses and in criticism of the input assumptions used by other parties. These arguments will not be addressed extensively in this opinion, since they do not materially alter model results.

The following tabulation summarized the average point of the individual financial models used by SCE and Aglet-TURN. The tabulation also includes the simple weighted average of those financial model results and individual ROE recommendation for SCE by SCE, Aglet-TURN and ORA

	CAPM	DCF	MRP	OVERALL	RECOMMENDED
				AVERAGE	ROE
SCE	12.04%	9.16%	11.35%	$10.85\%^{40}$	11.60%
Aglet-TURN	11.97%	9.66%	11.22%	$10.95\%^{41}$	10.20%
ORA	-	-	-	-	11.60%

The financial models are used only to establish a range from which individual judgment can be applied to determine a fair ROE. Each model complements the other to arrive at a balanced ROE range. The CAPM focuses on

 $^{^{40}}$ SCE did not identify an overall average. This average is a simple average of the three financial model average results calculated by SCE (9.16% plus 12.04% plus 11.35% divided by three).

 $^{^{41}\,}$ The 10.95% resulted from weighing the CAPM, DCF, and MRP model results equally. Aglet-TURN calculated a 10.60% average by applying less weight to its CAPM model result.

the kinds of risks for which investors demand compensation, the DCF on a cash flow stream, and the MRP risk positioning.

In the final analysis, it is the application of informed judgment, not the precision of financial models, which is the key to selecting a specific ROE estimate. We affirmed this view in D.89-10-031, which established ROEs for GTE California, Inc. and Pacific Bell, noting that we continue to view the financial models with considerable skepticism.

We find no reason to exclude or adopt the financial modeling results of any one party. Therefore, we will establish a ROE range based on the model results and informed judgment. After considering the evidence on the market conditions, trends, creditworthiness, interest rate forecasts, quantitative financial models based on subjective inputs, risk factors, and interest coverage presented by the parties and applying our informed judgment, we conclude that a subjective ROE range deemed fair and reasonable for SCE's test year 2005 is 10.40% to 11.40%.⁴²

We compared that range to the overall financial model results of SCE and Aglet-TURN and found it to be within the mid range of SCE's 7.89% to 13.72% and Aglet-TURN's 9.50% to 12.67% broad ROE range. We also observed that SCE's 7.89% to 13.72% broad range was lower than its 13.15% to 13.81% test year 2003 results while its common equity ratio of 48.00% remained constant, indicating a lower required ROE for its test year 2005 than approved for its test year 2003.43

⁴² Overall average of SCE and Aglet-TURN's financial models plus and minus 50 basis points.

⁴³ D.02-11-027, mimeo., Appendix A.

Having established a fair and reasonable ROE range based on the financial models we next consider the additional risks identified by the parties to determine what modification, if any, is warranted in setting a specific ROE. Those factors are regulatory and interest rate risks.

Aglet-TURN identified specific instances of improved California regulatory environment, some of which are identified in the above discussion of its recommendation. There is no dispute that the regulatory climate in California has improved from the utilities' prior ROE proceeding. However, the financial models are based on a proxy of comparable companies selected by the individual parties to assess a range or average ROE prior to assessing risks not reflected in those models.

There is no evidence, let alone a comparison between the California improved regulatory environment to the regulatory environment of the proxy companies, that justifies a substantial (100 basis points) downward adjustment from the financial models.⁴⁴ However, there is evidence that California's regulatory environment is rated average. For example, the Regulatory Research Associates raised its rating of California regulation to average in recognition of the progress California has made in stabilizing the electric industry and restoring the major utilities to financial health.⁴⁵ Therefore, we find no basis to reduce the utilities ROE for an improved California regulatory climate.

⁴⁴ Based on SCE's Late Filed Exhibit 34, a 100 basis points downward adjustment to SCE's ROE would equate to approximately \$77 million (100 basis points time \$769,000 per basis point change).

⁴⁵ Exhibit 30, p. 40.

As to interest rate risks, we consistently consider the current estimate and anomalous behavior of interest rates when making a final decision on authorizing a fair ROE. In PG&E's 1997 cost of capital proceeding we stated "Our consistent practice has been to moderate changes in ROE relative to changes in interest rates in order to increase the stability of ROE over time." ⁴⁶ That consistent practice has also resulted in the practice of only adjusting rate of return by one half to two thirds of the change in the benchmark interest rate. ⁴⁷

Consistent with our practice to moderate changes in ROE relative to changes in interest rates we compare the most recent trend of interest rate forecasts from the date that testimony was prepared in the April/May time period to the September 2004 submittal date. There was a 10 basis points increase in interest rate forecast from the May 2004 forecast of 6.59% to the September 2004 forecast of 6.69%. In contrast, the test year 2003 ROE proceeding experienced a 46 basis points decrease in interest rate forecast from the May 2002 Aa utility bond interest rate forecast of 7.62% to the September 2002 interest rate forecast of 7.16%. The current interest rate trend is moving in a moderate upward direction indicating increased interest rate risks.

Based on the recent interest rate changes, the utilities are facing increased interest rate risks warranting the approval of an ROE at the upper end of the ROE range found to be fair and reasonable in this proceeding. We apply informed judgment in setting SCE's test year 2005 ROE at 11.40%, the top of the ROE range found fair and reasonable for SCE. A comparison of that authorized

⁴⁶ 77 CPUC2d 556 at 563 (1996).

⁴⁷ 57 CPUC2d 533 at 549 (1994).

ROE to SCE's 11.60% requested and Aglet-TURN's 10.20% recommended ROE for SCE set forth in Appendix A demonstrates that the adopted ROE would not change SCE's position within the S&P benchmarks. Irrespective of which ROE is used, SCE's cash flow interest coverage, the most important ratio to SCG would remain in the A range of S&P's benchmarks and its debt to capital and cash flow to debt ratios would remain within the BBB range of S&P's benchmarks.

B. PG&E's Return on Equity

There are three distinct positions on PG&E's test year 2005 ROE. PG&E recommended an 11.60% ROE, Aglet-TURN 10.20%, and ORA 10.22%. There is no dispute on approving an 11.20% ROE for PG&E's true up 2004 year. That is because PG&E's Modified Settlement Agreement (MSA) approved in its bankruptcy proceeding requires a minimum of 11.22% ROE for PG&E until one of the rating agencies raises PG&E's company credit rating into an A category, which equates to at least a A-minus rating by S&P or a A3 rating by Moody's.

1. PG&E's Position

PG&E used a proxy group of 29 electric and 13 local natural gas distribution companies in its financial models as risk proxies. PG&E used only the DCF and MRP models. It did not use the CAPM financial model on the basis that significant adjustments to the model would be necessary to compensate for unusual conditions in the U.S. Treasury securities market, interest rate sensitivity of utility stocks, understated cost of equity for companies with betas of less than 1.0, and the CAPM failure to account for risks not accounted for by covariation with the market index.⁴⁸

⁴⁸ Exhibit 9, p. 2-7.

PG&E derived a broad 9.20% to 11.40% ROE range from its financial models. This broad range was derived from the lowest and highest results of the financial models undertaken by PG&E. The range of individual financial model results undertaken by PG&E, along with the results of Aglet-TURN and ORA's financial model results are set forth in Appendix C. The average point of PG&E's DCF was 9.60% and MRP 11.10%. PG&E then derived a 10.60%⁴⁹ simple average of its financial models prior to making an adjustment for financial risk. PG&E then adjusted the result of its financial models upward by 100 basis points to mitigate financial risk related to the difference between its equity level to the average equity level of its proxy companies.⁵⁰ That 100 basis points upward adjustment added to its 10.60% average result of its financial models equates to a test year 2005 ROE of 11.60%.

PG&E identified other risks in support of its position that its modeling result, even after adjustment for financial leverage, still understates its actual cost of equity. First, a hybrid generation industry, composed of unregulated generators and regulated utility generation, may lead to greater instability before a stable market design can be designed and implemented. Second, PG&E's high bundled electric prices provide a stimulus for the creation and growth of municipally owned and operated distribution systems within PG&E's territory, thereby increasing the potential for increasing competition for

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⁴⁹ DCF result of 9.60% plus an ex ante MRP of 11.10% plus an ex post MRP of 11.10% divided by three to equal 10.60%.

⁵⁰ PG&E's common equity ratio is 52% in comparison to its electric companies' proxy group common equity average of 56.09% and gas distribution companies' proxy group common equity average of 62.94%.

electric distribution service. Third, a firm just exiting bankruptcy will leave investors with some perception of an elevated level of risk due to the recent financial distress. PG&E equated those additional risks, not measurable by PG&E, to a level of risks that is somewhat greater than the average utility.⁵¹

2. Aglet-TURN's Position

Aglet-TURN applied its same model results and adjustments for regulatory and interest rate risks to PG&E that were addressed in the above SCE discussion. Although Aglet-TURN recommended a 10.20% ROE for PG&E, consistent with the other parties, it concluded that PG&E should be authorized the 11.22% minimum ROE required by the MSA approved in PG&E's bankruptcy proceeding. It also recommended that as soon as PG&E attains a rating agency upgrade to the A level that PG&E's authorized ROE should be lowered to Aglet-TURN's 10.20% recommended ROE from the 11.22% minimum ROE require by the MSA.

3. ORA's Position

ORA, not relying strictly on the changing interest rate environment as it did for SCE, applied the CAPM, DCF, and MRP financial models to determine its recommended ROE for PG&E. It used a proxy group of 29 electric and 12 local natural gas distribution companies in its financial models as risk proxies for PG&E. From those models, ORA derived a broad 8.99% to 11.15% ROE range. The average point of its CAPM was 10.89%, DCF 9.43%, and MRP 10.34%. Based on a simple average of the average point of its financial models,

⁵¹ Exhibit 9, p. 1-16.

ORA recommended a 10.22% ROE for PG&E's test year 2005. ORA made no adjustment for risks outside of the financial models.

ORA then considered the MSA executed by the Commission and PG&E, which was incorporated into PG&E's confirmed Plan of Reorganization. Based on its model results and the MSA guidelines, ORA recommended a ROE of 11.22% for PG&E's true up year 2004 and test year 2005.

4. Discussion

The process for setting a fair and reasonable ROE and use of financial models to assist us in establishing that ROE is set forth in our discussion of SCE's ROE and will not be repeated herein. Consistent with that discussion we use the same method for establishing a fair and reasonable ROE for PG&E.

The following tabulation summarized the average point of the individual financial models used by PG&E, Aglet-TURN and ORA, including the simple weighted average of the financial model results and recommended test year 2005 ROE for PG&E by those parties.

	CAPM	DCF	MRP	OVERALL	RECOMMENDED
				AVERAGE	ROE
PG&E	9.60%	-	11.10%	$10.35\%^{52}$	11.60%
Aglet-TURN	9.66%	11.97%	11.22%	10.95%	10.20%

The 10.35% resulted from weighing the CAPM and MRP model results equally on the basis that PG&E's 11.10% Ex Ante RPM and 11.10% Ex Post RMP result affirmed PG&E's conclusion that its RMP average was 11.10%. PG&E derived a 10.60% overall average based on the inclusion of its CAPM, Ex Ante RPM and Ex Post RMP.

⁵³ The 10.95% resulted from weighing the CAPM, DCF, and MRP model results equally. Aglet-TURN calculated a 10.60% average by applying less weight to its CAPM model result.

	ORA	9.43%	10.89%	10.34%	10.22%	11.22%
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Consistent with our SCE financial model discussion, we find no reason to exclude or adopt the financial modeling results of any one party. Therefore, we will establish a ROE range based on the model results and informed judgment.

After considering the evidence on the market conditions, trends, creditworthiness, interest rate forecasts, quantitative financial models based on subjective inputs, risk factors, and interest coverage presented by the parties and applying our informed judgment, we conclude that a subjective range of ROE deemed fair and reasonable for PG&E's test year 2005 is 10.01% to 11.01% prior to consideration of PG&E's financial leverage proposal.⁵⁴ A comparison of that range to the overall financial model results of PG&E, Aglet-TURN, and ORA finds it to be in the upper range of PG&E's 9.20% to 11.40% broad range, Aglet-TURN's 9.50% to 12.67%, and ORA's 8.99% to 11.15%.

PG&E's proposal to mitigate financial leverage by a 100 basis points upward adjustment to its authorized ROE was based on an after-tax weighted average cost of capital (ATWACC) difference between its test year 2005 capital structure and the average capital structures of its electric and gas proxy groups.

PG&E introduced the concept of using ATWACC in its test year 1999 ROE proceeding (A.98-05-021). At that time, PG&E sought a 100 basis points upward adjustment to its authorized ROE on the basis that cost of capital is independent of a company's actual debt/equity capital structure as long as its

 $^{^{54}\,}$ Overall average of PG&E, Aglet-TURN, and ORA's financial models plus and minus 50 basis points.

structure is within the broad range where cost of capital remains constant.⁵⁵ With no evidence on how ATWACC would perform under a range of economic conditions and no comparative information to gauge how it compared to the broader market, we did not find that ATWACC was more accurate or useful than other methods with which we use. We continued to rely on the CAPM, DCF, and MRP as a basis for determining a fair and reasonable ROE.

In this proceeding, PG&E provided evidence on how its ATWACC would compare to its electric and gas proxy groups. PG&E demonstrated that its test year 2005 common equity ratio of 52% is 4% lower than the 56% average of its electric proxy group and 11% lower than the 63% average of its gas proxy group. Based on PG&E's assumption that it was comparable in risks to its electric and gas proxy groups, PG&E applied a 7.82% ATWACC, simple average of its electric companies proxy group ATWACC average of 7.666% and gas proxy group average of 8.079%, to PG&E's Test Year 2005 capital structure. The result of that calculation was 11.65%. The difference between PG&E's financial models simple average result of 10.60% and its ATWAAC result of 11.65% was 105 basis points, of which PG&E rounded to 100 basis points to arrive at a 11.60% ROE for its test year 2005. Based on the 10.51% simple average of all the parties' financial model results, a 100 basis points upward adjustment would equate to a test year 2005 ROE of 11.51%.

If the ATWAAC method proposed by PG&E were adopted, the use of informed judgment in determining a fair and reasonable ROE would appear to be restricted to the selection of only comparable electric and gas proxies,

⁵⁵ D.99-06-057, mimeo., p. 47.

preclude the establishment of a range of reasonableness, and eliminate the need for the CAPM, DCF, and MRP financial models. We are also concerned with PG&E's use of a simple average of electric and gas proxy groups having substantially different common equity ratios (56.09% for electric and 62.94% for gas) while PG&E has a ratemaking common equity ratio of 52.00% and its electric operations represent 75% of its total operations. Absent more evidence on the merits of using an ATWAAC method, we are not prepared to relinquish our informed judgment in establishing either a range of reasonableness or a specific ROE. We do invite PG&E to provide additional evidence on the use of ATWCC in its next ROE proceeding.

With the factoring in of increased interest rate risks and rejection of PG&E's financial leverage proposal, PG&E's test year 2005 ROE should be set at 11.01%, the top of its 10.01% to 11.01% ROE range found reasonable. However, that ROE is lower than the 11.22% ROE approved in PG&E's bankruptcy proceeding as part of the MSA. Therefore, consistent with the terms of the MSA, PG&E's true up year 2004 and test year 2005 ROE should remain at 11.22%. That adopted ROE would not change PG&E's position within the S&P benchmarks, as shown in Appendix A. While PG&E's debt to capital ratio would decline from S&P's A range to BBB range with the inclusion of debt equivalence, PG&E's cash flow interest coverage, the most important ratio to PG&E would remain within S&P's A range benchmark and cash flow to debt remain within S&P's BBB range.

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 $^{^{56}\,}$ Reporter's Transcript Vol. 2, p. 233, lines 22 to 28.

VII. Implementation

SCE should include the revenue requirement impact of this decision in its test year 2005 advice letter filing.

Consistent with PG&E's implementation proposal, PG&E shall include electric revenue requirement changes authorized in this proceeding in an advice letter filing. Changes in electric distribution, electric generation, regulatory asset revenue requirements for the adopted ROE would accrue in the appropriate balancing or memorandum accounts until they can be incorporated into rates charged customers. Changes applicable to direct access rates would be made at the same time as changes in distribution and regulatory asset rates.

For gas distribution changes, revenue requirement changes would be recorded in its Core Fixed Cost Account and Non-core Customer Class Charge Account for recovery in the next Annual True Up of Balancing Accounts or Biennial Cost Allocation Proceeding. Gas transmission and storage rates would be adjusted to reflect revenue requirement changes affecting those rates. PG&E would allocate the revenue requirement changes to core and non-core customers based on the pro rata share of revenue requirements, consistent with the method approved in Advice Letter 2521-G. The core portion would be transferred to the core fixed cost account and the non-core portion to the non-core customer class charge account for incorporation into rates in its next gas transportation rate change or true up.

VIII. Comments on Proposed Decision

The proposed decision of the ALJ in this matter was mailed to the parties in accordance with Pub. Util. Code § 311(d) and Rule 77.1 of the Rules of Practice and Procedure. Comments were filed on December 6 and 7, 2004, and reply comments were filed on December 13, 2004. The comments did not result in any

material change. To the extent such comments required discussion or changes to the proposed decision, the discussion or changes have been incorporated into the body of this order.

IX. Assignment of Proceeding and Procedural Matters

Geoffrey F. Brown is the Assigned Commissioner and Michael J. Galvin is the assigned Administrative Law Judge (ALJ) in this proceeding.

The utilities requested that their respective ROE application be classified as a ratesetting proceeding within the meaning of Rule 5(c). By Resolution ALJ 176-3134, dated May 27, 2004, the Commission preliminarily determined that the applications of SCE and PG&E were ratesetting proceedings and that hearings were expected. This ratesetting classification was subsequently affirmed in the Assigned Commissioner Brown's July 15, 2004 Scoping Memo and Ruling.

That Scoping Memo and Ruling, among other matters, designated ALJ Galvin as the principal hearing officer, established an evidentiary hearing schedule and determined the issues of this proceeding. Those issues encompassed all estimates, including debt equivalence, upon which the utilities proposed capital structure and rate of return for the test year 2005 were based on and PG&E's true-up of its 2004 cost of capital, including hedging.

An evidentiary hearing was held on September 13, 2004 and continued through September 16, 2004. Each of the utilities, Aglet-TURN, and ORA submitted testimony and evidence. The proceeding was submitted upon the receipt of October 5, 2004 reply briefs.

Findings of Fact

1. Applicants are public utilities subject to the jurisdiction of this Commission.

- 2. SCE seeks to maintain its test year 2005 ROE at 11.60%.
- 3. PG&E seeks to true up its year 2004 capital structure with an 11.22% ROE and to increase its test year 2004 ROE to 11.60%.
 - 4. SCE and PG&E's applications were consolidated pursuant to Rule 55.
- 5. The issue of debt equivalence was included in this proceeding pursuant to D.04-01-050. SDG&E presented testimony on the impact of debt equivalence policy.
- 6. Debt equivalence is a term used by credit analysts for treating long-term non-debt obligations, such as PPAs and leases, as if they were debt in assessing an entity's credit rating.
 - 7. Credit rating agencies have long recognized debt equivalence risks.
- 8. Credit rating agencies impute debt from long-term energy procurement contracts in their credit analyses of California utilities.
- 9. Debt equivalence associated with long-term PPAs can affect utility credit ratios and credit ratings.
- 10. The rating agencies, Fitch, Moody's, and S&P did not participate in this proceeding.
- 11. SCE has investment grade credit ratings of A-3 from Moody's and BBB from S&P.
 - 12. PG&E has an investment grade rating of BBB- from S&P.
- 13. The inclusion or exclusion of PPA debt equivalence impacts did not materially impact the SCE or PG&E's interest coverage or cash flow to debt results presented in this proceeding.
- 14. SDG&E provided no information on its current credit ratings and insufficient information to enable us to assess the debt equivalence impact on its overall credit ratings and capital structure.

- 15. SCE requested a 2005 capital structure consisting of 43.00% long-term debt, 9.00% preferred stock, and 48.00% common equity.
- 16. PG&E requested a true up 2004 capital structure of 48.20% long-term debt, 2.80% preferred stock, and 49.00% common equity.
- 17. PG&E's proposed capital structures are consistent with the implementation of its Chapter 11 exit financing and capital structure provision set forth in its MSA.
- 18. We recognized in D.90-11-057 that actual interest rates do vary and that our task is to determine reasonable debt costs rather than actual cost based on an arbitrary selection of a past figure.
- 19. SCE submitted late-filed Exhibit 34 and PG&E late-filed Exhibit 35 to reflect the most recent forecast of interest rates, September 2004 Global Insight forecasted interest rates.
- 20. PG&E's 2005 long-term debt cost is based in part on its forecast in cost of debt changes that would occur and in part on its expected implementation of DRC financing.
- 21. The DRC proceeds that PG&E expects to receive would be used to pay off existing debt and to buy back common stock so that PG&E can achieve and maintain a target capital structure containing 52% common equity.
- 22. PG&E included approximately \$44 million in interest rate hedging cost as a component of its test year 2005 long-term debt.
- 23. There was no dispute on SCE's cost of long-term debt or on PG&E's costs of long-term debt and preferred stock.
- 24. ORA's forecast of SCE's preferred stock cost was based on the issuance of a type of preferred stock that SCE would not be issuing.

- 25. A Commission Financing Team reviewed PG&E's hedging analysis and supported the terms of the hedges and PG&E's strategy for executing hedges.
- 26. The legal standard for setting the fair ROE has been established by the United States Supreme Court in the <u>Bluefield</u> and <u>Hope</u> cases.
- 27. An ROE is set at a level of return commensurate with market returns on investments having corresponding risks, and adequate to enable a utility to attract investors to finance the replacement and expansion of a utility's facilities to fulfill its public utility obligation.
- 28. Quantitative financial models are commonly used as a starting point to estimate a fair ROE.
- 29. Although the quantitative financial models are objective, the results are dependent on subjective inputs.
- 30. It is the application of informed judgment, not the precision of quantitative financial models, which is the key to selecting a specific ROE.
- 31. The individual parties' use of quantitative financial models resulted in a broad test year 2005 ROE range from 7.89% to 13.72% for SCE and 9.20% to 12.67% for PG&E.
- 32. Two important components of the <u>Hope</u> and <u>Bluefield</u> decisions are that the utilities have the ability to attract capital to raise money for the proper discharge of their public utility duties and to maintain creditworthiness.
- 33. Our consistent practice has been to moderate changes in ROE relative to changes in interest rates in order to increase the stability of ROE over time.
- 34. The September 2004 Aa utility bond interest rate forecast for test year 2005 is 6.69%, a 10 basis points increase in interest rate from the April 2004 forecast of 6.59%.

Conclusions of Law

- 1. The capital structures proposed by SCE and PG&E should be adopted because they are balanced, attainable, and intended to maintain an investment grade rating and attract capital.
- 2. The long-term debt and preferred stock costs being proposed by the utilities are consistent with the law, in the public interest, and should be adopted.
- 3. Debt equivalence does not have a material impact on either SCE or PG&E's credit ratios or capital structure presented and considered in this proceeding.
- 4. SDG&E should be required to file a test year 2006 cost of capital application.
- 5. SDG&E should file a test year 2006 ROE application by May 9, 2005, along with SCE and PG&E, so that we may properly assess what impact, if any, that debt equivalence has on its credit ratings and capital structure, including mitigation recommendations.
- 6. To the extent that SDG&E believes that debt equivalence may have a material impact and recurring drain on its credit ratios or ratings, SDG&E should consider modifying its MICAM settlement agreement so that it may resolve that concern through yearly ROE applications.
- 7. The utilities should include debt equivalence impacts as part of their ROE applications.
- 8. Debt equivalence should be considered with other financial, regulatory, and operational risks in setting a fair ROE and balanced capital structure reasonably sufficient to assure confidence in the financial soundness of the utility to maintain and support investment grade credit ratings.

- 9. The major utilities should include in their annual cost of capital applications recommendations for improving and maintaining their credit ratings.
- 10. Risks being experienced by the utilities warrant the ROEs being adopted in this proceeding at the upward end of an ROE range found just and reasonable.
- 11. The latest available interest rate forecast should be used to determine embedded long-term debt and preferred stock costs in ROE proceedings.
- 12. PG&E should be authorized to recover its hedging costs as part of its long-term debt.
- 13. PG&E's costs of long-term debt and preferred stock for true up year 2004 and test year 2005 should be adopted.
- 14. SCE's costs of long-term debt and preferred stock for test year 2005 should be adopted.
 - 15. An upward trend in interest rates warrants an upward adjustment in ROE.
- 16. A test year ROE range from 10.40% to 11.40% is just and reasonable for SCE based on financial model results.
- 17. A test year 2005 ROE of 11.40%, which results in an overall 9.07% return on rate base should be adopted as just and reasonable for SCE based upon all of the evidence considered in this proceeding.
- 18. A test year 2005 ROE range from 10.01% to 11.01% is just and reasonable for PG&E based on financial model results; however, that ROE is lower than the 11.22% ROE approved in PG&E's bankruptcy proceeding, as part of the MSA, which prevents adoption of the lower figure.
- 19. A true up year 2004 and test year 2005 ROE of 11.22% ROE resulting in an overall 8.53% and 8.77% return on rate base, respectively, is consistent with the MSA should be adopted as just and reasonable for PG&E.

20. The utilities ROE applications should be granted to the extent provided for in the following order.

ORDER

IT IS ORDERED that:

1. Southern California Edison Company's (SCE) cost of capital for its test year 2005 is as follows:

	Capital Ratio	Cost Factor	Weighted Cost
Long-Term Debt	43.00%	6.96%	2.99%
Preferred Stock	9.00	6.73	0.61
Common Stock	48.00	11.40	5.47
Total	100.00%		9.07%

2. Pacific Gas and Electric Company's (PG&E) cost of capital for true up year 2004 electric and gas operations is as follows:

	Capital Ratio	Cost Factor	Weighted Cost
Long-Term Debt	48.20%	5.90%	2.84%
Preferred Stock	2.80	6.76	0.19
Common Stock	49.00	11.22	<u>5.50</u>
Total	100.00%		8.53%

3. PG&E's cost of capital for its test year 2005 electric and gas operations is as follows:

	Capital Ratio	Cost Factor	Weighted Cost
Long-Term Debt	45.50%	6.10%	2.78%
Preferred Stock	2.50	6.42	0.16
Common Stock	52.00	11.22	5.83
Total	100.00%		8.77%

- 4. PG&E's hedging cost incurred as part of its Commission approved financing plan to exit Chapter 11 was reasonable and is recoverable over the life of the debt that was hedged.
- 5. SCE and PG&E shall implement the revenue requirement changes authorized by this decision as set forth in the body of this order. If the Energy Division Director suspends any tariffs, such tariffs shall become effective upon the date the Energy Division Director confirms that the tariffs are in compliance.
- 6. The utilities, as part of their annual cost of capital applications shall include testimony on credit ratios, credit ratings, and capital structure impacts, including mitigation recommendations, of debt equivalence on their PPAs.

Information to be provided shall include current credit ratings from Moody's and S&P; expected impact of its credit ratings due to debt equivalence; capital structure and return on equity with and without debt equivalence; debt to capital, cash flow interest coverage, and cash flow to debt financial ratios with and without debt equivalence; and, pre and post-tax financial ratios. The utilities may also make recommendations for improving and maintaining their credit ratings for Commission consideration.

- 7. San Diego Gas & Electric Company shall file a test year 2006 cost of capital application by May 9, 2005. That application shall include testimony on the impact that debt equivalence has on its current and projected credit ratings, capital structure, and return on equity.
 - 8. Application (A.) 04-05-021 and A.04-05-023 are closed. This order is effective today.

Dated December 16, 2004, at San Francisco, California.

MICHAEL R. PEEVEY
President
GEOFFREY F. BROWN
SUSAN P. KENNEDY
Commissioners

I reserve the right to file a dissent.

/s/ CARL W. WOOD Commissioner

I reserve the right to file a dissent.

/s/ LORETTA M. LYNCH Commissioner

APPENDIX A

SCE AND PG&E TEST YEAR 2005 CREDIT RATIOS DEBT EQUIVALENCE IMPACT ON S&P's BENCHMARKS

		Equity	Debt to	Interest	Cash
Utility	PPAs	Return	Capital	Coverage	Flow/Debt
SCE <u>1</u> /	Excluded	10.20%	51.9%	5.18x	23.4%
	Included	10.20%	55.6%	4.23x	20.1%
SCE <u>2</u> /	Excluded	11.60%		5.40x	24.0%
	Included	11.60%		4.40x	21.0%
SCE <u>3</u> /	Included	11.60%		4.60x	22.0%
	Included	11.60%		4.40x	21.0%

S&P BENCHMARKS

A Range	(BOLD NUMB)	ERS)	40% - 48%	5.2x - 4.2x	35 % - 28 %
BBB Rang	ge <i>(ITALIC NUM</i>	(BERS)	<i>48%-58%</i>	4.2x - 3.0x	<i>28% - 18%</i>
PG&E <u>4</u> /	Excluded Included	11.22% 11.22%	47.4% 50.5%	6.3x 5.1x	25.7% 22.5%

- 1/ (Exhibit 7, p. 2).
- $\underline{2}$ / (Exhibit 3, p. 21).
- $\underline{3}/\,$ Based on a Preferred Stock ratios of 9% and 5%, respectively. (Exhibit 3, p. 25).
- 4/ Exhibit 12, p. 6-29.

(END OF APPENDIX A)

APPENDIX B

SOUTHERN CALIFORNIA EDISON COMPANY RESULTS OF FINANCIAL MODELS

	CAPM DCF MRP				
SCE	10.33% - 13.72%	7.89% - 12.06%	11.35%		
Aglet	11.27% - 12.67%	9.50% - 10.16%	11.20% - 11.24%		
ORA	(Did not apply the Financial Models)				

(END OF APPENDIX B)

APPENDIX C

PACIFIC GAS & ELECTRIC COMPANY RESULTS OF FINANCIAL MODELS

	САРМ	DCF	MRP
PG&E	-	9.20% - 10.10%	10.80% - 11.40%
Aglet	11.27% - 12.67%	9.50% - 10.16%	11.20% - 11.24%
ORA	10.67% - 11.10%	8.99% - 9.86%	9.53% - 11.15%

(END OF APPENDIX C)